Flight-Testing Newton's Laws							
2010 Science							
Standards of Learning							
Virginia Science	\						
Grades 9-12 (Physics Activity/Lesson	State	Standards					
Activity/Lesson	State	Statiuarus	The student will investigate and understand how				
			to demonstrate scientific reasoning and logic.				
			Key concepts include analysis of how science				
Session-10 (1-5)	VA	SCI.9-12.PH.3.b	explains and predicts relationships;				
,			The student will investigate and understand the				
			interrelationships among mass, distance, force,				
			and time through mathematical and				
			experimental processes. Key concepts include				
Session-10 (1-5)	VA	SCI.9-12.PH.5.b	uniform circular motion				
			The student will investigate and understand the				
			interrelationships among mass, distance, force,				
			and time through mathematical and experimental processes. Key concepts include				
Session-10 (1-5)	VA	SCI 0 12 DH 5 d	Newton's laws of motion;				
06331011-10 (1-3)		301.9-12.1 11.3.u	The student will investigate and understand the				
			interrelationships among mass, distance, force,				
			and time through mathematical and				
			experimental processes. Key concepts include				
Session-10 (1-5)	VA	SCI.9-12.PH.5.e					
			The student will investigate and understand how				
			to demonstrate scientific reasoning and logic.				
			Key concepts include analysis of how science				
Session-1 (1-17)	VA	SCI.9-12.PH.3.b	explains and predicts relationships;				
			The student will investigate and understand the				
			interrelationships among mass, distance, force,				
			and time through mathematical and experimental processes. Key concepts include				
Session-1 (1-17)	VA	SCI 9-12 PH 5 h	uniform circular motion				
00331011-1 (1-17)	V/1	001.0-12.1 11.0.0	The student will investigate and understand the				
			interrelationships among mass, distance, force,				
			and time through mathematical and				
			experimental processes. Key concepts include				
Session-1 (1-17)	VA	SCI.9-12.PH.5.d	Newton's laws of motion;				
			The student will investigate and understand the				
			interrelationships among mass, distance, force,				
			and time through mathematical and				
Section 1 (1.17)	\/A	COLO 12 DU 5 a	experimental processes. Key concepts include				
Session-1 (1-17)	VA	SCI.9-12.PH.5.e	The student will investigate and understand how				
			to demonstrate scientific reasoning and logic.				
			Key concepts include analysis of how science				
Session-2 (1-10)	VA	SCI.9-12.PH.3.b	explains and predicts relationships;				
		220 .2	The student will investigate and understand the				
			interrelationships among mass, distance, force,				
			and time through mathematical and				
			experimental processes. Key concepts include				
Session-2 (1-10)	VA	SCI.9-12.PH.5.b	uniform circular motion				

			The standard will be setting to an invariant and the
			The student will investigate and understand the
			interrelationships among mass, distance, force,
			and time through mathematical and
			experimental processes. Key concepts
Session-2 (1-10)	VA	SCI.9-12.PH.5.d	includeNewton's laws of motion;
			The student will investigate and understand the
			interrelationships among mass, distance, force,
			and time through mathematical and
			experimental processes. Key concepts include
Session-2 (1-10)	VA	SCI.9-12.PH.5.e	
,			The student will investigate and understand how
			to demonstrate scientific reasoning and logic.
			Key concepts include analysis of how science
Session-3 (1-6)	VA	SCI 9-12 PH 3 h	explains and predicts relationships;
00001011 0 (1 0)	771	001.0 12.1 11.0.5	The student will investigate and understand how
			to demonstrate scientific reasoning and logic.
			Key concepts include analysis of how science
Cossion 4 (1 11)	VA	SCI 0 12 DU 2 h	, , ,
Session-4 (1-11)	VA	3CI.9-12.PH.3.D	explains and predicts relationships;
			The student will investigate and understand how
			to demonstrate scientific reasoning and logic.
			Key concepts include analysis of how science
Session-5 (1-6)	VA	SCI.9-12.PH.3.b	explains and predicts relationships;
			The student will investigate and understand the
			interrelationships among mass, distance, force,
			and time through mathematical and
			experimental processes. Key concepts include
Session-5 (1-6)	VA	SCI.9-12.PH.5.d	Newton's laws of motion;
			The student will investigate and understand how
			to demonstrate scientific reasoning and logic.
			Key concepts include analysis of how science
Session-6 (1-8)	VA	SCI.9-12.PH.3.b	explains and predicts relationships;
()	.,,,		The student will investigate and understand the
			interrelationships among mass, distance, force,
			and time through mathematical and
			experimental processes. Key concepts include
Session-6 (1-8)	VA	SCI 0 12 DU 5 h	uniform circular motion
36881011-0 (1-0)	VA	3CI.9-12.PH.5.D	
			The student will investigate and understand the
			interrelationships among mass, distance, force,
			and time through mathematical and
			experimental processes. Key concepts include
Session-6 (1-8)	VA	SCI.9-12.PH.5.d	Newton's laws of motion;
			The student will investigate and understand the
			interrelationships among mass, distance, force,
			and time through mathematical and
			experimental processes. Key concepts include
Session-6 (1-8)	VA	SCI.9-12.PH.5.e	
,			The student will investigate and understand how
			to demonstrate scientific reasoning and logic.
			Key concepts include analysis of how science
Session-7 (1-5)	VA	SCI 9-12 PH 3 h	explains and predicts relationships;
22301011 7 (1 0)	•/ •	551.5 12.1 11.5.5	explains and prodicto relationships,

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			The student will investigate and understand the
			interrelationships among mass, distance, force,
			and time through mathematical and
			experimental processes. Key concepts include
Session-7 (1-5)	VA	SCI.9-12.PH.5.b	uniform circular motion
			The student will investigate and understand the
			interrelationships among mass, distance, force,
			and time through mathematical and
			experimental processes. Key concepts include
Session-7 (1-5)	VA	SCI.9-12.PH.5.d	Newton's laws of motion;
			The student will investigate and understand the
			interrelationships among mass, distance, force,
			and time through mathematical and
			experimental processes. Key concepts include
Session-7 (1-5)	VA	SCI.9-12.PH.5.e	gravitation;;
			The student will investigate and understand how
			to demonstrate scientific reasoning and logic.
			Key concepts include analysis of how science
Session-8 (1-9)	VA	SCI.9-12.PH.3.b	explains and predicts relationships;
			The student will investigate and understand the
			interrelationships among mass, distance, force,
			and time through mathematical and
			experimental processes. Key concepts
Session-8 (1-9)	VA	SCI.9-12.PH.5.d	includeNewton's laws of motion;
			The student will investigate and understand how
			to demonstrate scientific reasoning and logic.
			Key concepts include analysis of how science
Session-9 (1-7)	VA	SCI.9-12.PH.3.b	explains and predicts relationships;
			The student will investigate and understand the
			interrelationships among mass, distance, force,
			and time through mathematical and
			experimental processes. Key concepts
Session-9 (1-7)	VA	SCI.9-12.PH.5.d	includeNewton's laws of motion;